

## **PM<sub>10</sub> Air Quality Data Update 2004-2006 Estimated Exceedance Counts**

The following is a brief summary of EPA's air quality update for PM<sub>10</sub> based on ambient monitoring data for the three-year period, 2004-2006. During this three-year period:

- 12 the original 87\* areas designated nonattainment for the PM<sub>10</sub> failed to meet the (24-hour) PM<sub>10</sub> NAAQS in 2004-2006 (Table 1).
- 28 additional areas (counties) also failed to meet the (24-hour) PM<sub>10</sub> NAAQS in 2004-2006 (Table 2).

\* Previously, the count of original, designated nonattainment areas was listed as 86. In March 2007, the Hayden/Miami PM<sub>10</sub> nonattainment area was split into two separate PM<sub>10</sub> nonattainment areas (Hayden and Miami).

Two primary PM<sub>10</sub> standards were established by EPA in 1987 for the protection of public health. The 1987 PM<sub>10</sub> NAAQS consisted of both a short-term (24-hour) standard and a long-term (annual) standard. EPA set the 24-hour PM<sub>10</sub> standard at 150 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) and the annual PM<sub>10</sub> standard at 50  $\mu\text{g}/\text{m}^3$ . In September 2006, EPA completed a review of the particle pollution NAAQS. In the final rule, EPA retained the 24-hour PM<sub>10</sub> standard but revoked the annual PM<sub>10</sub> standard. The revision became effective December 18, 2006. Compliance with the 24-hour standard is judged on the basis of the most recent three years of ambient air quality monitoring data. The 24-hour PM<sub>10</sub> standard is not met at a monitoring site if the average number of estimated exceedances of the level of the standard is greater than 1.0 (1.05 rounds up).

Air quality data from EPA's Air Quality System (AQS) were used to calculate PM<sub>10</sub> estimated exceedances. The specific calculations are explained in footnotes to the tables below. The data used for these calculations were obtained from AQS on July 11, 2007. To date, no regulatory decisions on attainment status have been made for any area based on these specific calculations. For information concerning these data and/or calculations, contact:

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**Table 1. Areas previously designated nonattainment for the PM10 NAAQS, 2004-2006.**

State	Designated Area	EPA Region	Status	Classification	2004-2006 Expected Number	Met NAAQS
					of Exceedances <sup>1</sup>	2004-2006?
AK	Eagle River	10	Nonattainment	Moderate	0	yes
AK	Juneau	10	Nonattainment	Moderate	0	yes
AZ	Ajo	9	Nonattainment	Moderate	0	yes
AZ	Bullhead City	9	Maintenance	Moderate	0	yes
AZ	Douglas/Paul Spur	9	Nonattainment	Moderate	0	yes
AZ	Hayden <sup>3</sup>	9	Nonattainment	Moderate	0	yes
AZ	Miami <sup>3</sup>	9	Nonattainment	Moderate	0	yes
AZ	Nogales	9	Nonattainment	Moderate	12.9	no
AZ	Payson	9	Maintenance	Moderate	0	incomplete
AZ	Phoenix	9	Nonattainment	Serious	15.9	no
AZ	Rillito	9	Nonattainment	Moderate	0	yes
AZ	Yuma	9	Nonattainment	Moderate	0	yes
CA	Coachella Valley	9	Nonattainment	Serious	2.2	no
CA	Coso Junction	9	Nonattainment	Moderate	1.0	incomplete
CA	Imperial Valley	9	Nonattainment	Moderate	11.9	no
CA	Indian Wells Valley	9	Maintenance	Moderate	0	incomplete
CA	Mammoth Lakes	9	Nonattainment	Moderate	0	yes
CA	Mono Basin	9	Nonattainment	Moderate	22.2	no
CA	Owens Valley	9	Nonattainment	Serious	18.8	no
CA	Sacramento County	9	Nonattainment	Moderate	0.3	yes
CA	San Bernardino	9	Nonattainment	Moderate	1.0	yes
CA	San Joaquin Valley	9	Nonattainment	Serious	(4)	(4)
CA	South Coast Air Basin	9	Nonattainment	Moderate	0	no
CA	Trona	9	Nonattainment	Moderate	0.7	yes
CO	Aspen	8	Maintenance	Moderate	0	yes
CO	Canon City	8	Maintenance	Moderate	0	incomplete
CO	Denver	8	Maintenance	Moderate	0	yes
CO	Lamar	8	Maintenance	Moderate	0	yes
CO	Pagosa Springs	8	Maintenance	Moderate	0	incomplete
CO	Steamboat Springs	8	Maintenance	Moderate	0	yes
CO	Telluride	8	Maintenance	Moderate	0	yes
CT	New Haven	1	Maintenance	Moderate	0	incomplete
ID	Boise	10	Maintenance	Moderate	0	yes
ID	Fort Hall	10	Nonattainment	Moderate	1.1	no
ID	Pinehurst	10	Nonattainment	Moderate	0	yes
ID	Portneuf Valley	10	Maintenance	Moderate	0	yes
ID	Sandpoint(Bonner County)	10	Nonattainment	Moderate	0	yes
ID	Shoshone County	10	Nonattainment	Moderate	0	yes
IL	Granite City	5	Maintenance	Moderate	0	yes
IL	Lyons Township	5	Maintenance	Moderate	0	yes
IL	Oglesby	5	Maintenance	Moderate	0	yes
IL	Southeast Chicago	5	Maintenance	Moderate	0	yes
IN	Lake County	5	Maintenance	Moderate	1.7	no
IN	Vermillion	5	Maintenance	Moderate	ND	incomplete
ME	Presque Isle	1	Maintenance	Moderate	0	yes
MI	Detroit	5	Maintenance	Moderate	0.7	yes
MN	Rochester	5	Maintenance	Moderate	ND	incomplete
MN	Saint Paul	5	Maintenance	Moderate	0	yes
MT	Butte	8	Nonattainment	Moderate	0	yes
MT	Columbia Falls	8	Nonattainment	Moderate	0	yes
MT	Kalispell	8	Nonattainment	Moderate	0	yes
MT	Lame Deer	8	Nonattainment	Moderate	0	incomplete
MT	Libby	8	Nonattainment	Moderate	0	yes
MT	Missoula	8	Nonattainment	Moderate	0	incomplete
MT	Polson	8	Nonattainment	Moderate	0	incomplete
MT	Ronan	8	Nonattainment	Moderate	0	incomplete
MT	Thompson Falls	8	Nonattainment	Moderate	0	yes
MT	Whitefish	8	Nonattainment	Moderate	0.3	yes
NM	Anthony	6	Nonattainment	Moderate	5.2	no
NV	Las Vegas	9	Nonattainment	Serious	0.4	yes
NV	Washoe County (Reno)	9	Nonattainment	Moderate	0.3	yes
NY	New York	2	Nonattainment	Moderate	ND	incomplete
OH	Cuyahoga County	5	Maintenance	Moderate	0	yes
OH	Mingo Junction	5	Maintenance	Moderate	0	yes
OR	Eugene/Springfield	10	Nonattainment	Moderate	0	yes
OR	Grants Pass	10	Maintenance	Moderate	0	yes

**Table 1. Areas previously designated nonattainment for the PM10 NAAQS, 2004-2006.**

State	Designated Area	EPA Region	Status	Classification	2004-2006 Expected Number of Exceedances <sup>1</sup>	Met NAAQS 2004-2006?
OR	Klamath Falls	10	Maintenance	Moderate	0	yes
OR	La Grande	10	Maintenance	Moderate	0	incomplete
OR	Lakeview	10	Maintenance	Moderate	0	yes
OR	Medford	10	Maintenance	Moderate	0	yes
OR	Oakridge	10	Nonattainment	Moderate	0	yes
PA	Clairton	3	Maintenance	Moderate	0.7	yes
PR	Guaynabo	2	Nonattainment	Moderate	0	yes
TX	El Paso	6	Nonattainment	Moderate	9	no
UT	Ogden	8	Nonattainment	Moderate	0	yes
UT	Salt Lake County	8	Nonattainment	Moderate	1.1	no
UT	Utah County	8	Nonattainment	Moderate	0.3	yes
WA	Kent	10	Maintenance	Moderate	0	incomplete
WA	Olympia	10	Maintenance	Moderate	0	incomplete
WA	Seattle	10	Maintenance	Moderate	0	incomplete
WA	Spokane	10	Maintenance	Moderate	0	yes
WA	Tacoma	10	Maintenance	Moderate	0	incomplete
WA	Wallula	10	Maintenance	Serious	0	incomplete
WA	Yakima	10	Maintenance	Moderate	0	yes
WV	Follansbee	3	Maintenance	Moderate	0	yes
WV	Weirton	3	Maintenance	Moderate	0	yes
WY	Sheridan	8	Nonattainment	Moderate	0	incomplete

**Notes:**

Underlined values are based on incomplete data and are generally not valid for regulatory usage. Either there are no other sites in the area with complete data for this three-year period or a complete site(s) is located in the area but has an expected estimated exceedance value of zero and an incomplete site in the area registered the non-zero value shown.

1. The updated design values are computed for the 2004-2006 period using federal reference or equivalent PM10 data reported by the Tribes and the State and local governments to EPA's Air Quality System (AQS) as of July 10, 2007. Concentrations flagged by States and Tribes as exceptional events (e.g. high winds, wildfires, volcanic eruptions, construction) and concurred by the EPA Regional Office are not included in the calculation of these design values. The computation procedures for calculating estimated expected exceedances follow 40 CFR Part 50, Appendix K.. No regulatory decisions on attainment status have been made for areas based upon this data. In some cases the data are still under review.
2. On August 6, 2002, EPA finalized certain actions affecting the Searles Valley, California, PM<sub>10</sub> nonattainment area, which is located in the rural high desert and includes portions of Inyo, Kern, and San Bernardino Counties. The action splits the Searles Valley nonattainment area into three separate areas: Coso Junction, Indian Wells Valley and Trona. EPA's action also determines that the Trona area attained the PM<sub>10</sub> standards by December 31, 1994. On May 7, 2003, EPA finalized approval of the Indian Wells Moderate Area and Maintenance Plan and redesignated the area from nonattainment to attainment for particulate matter (PM<sub>10</sub>). Source: <http://www.epa.gov/region9/air/searlespm/index.html>
3. On March 28, 2007 EPA approved the redesignation of the Hayden/Miami PM<sub>10</sub> nonattainment area into two separate PM<sub>10</sub> nonattainment areas: Hayden and Miami. EPA also determined that the Miami PM<sub>10</sub> nonattainment area attained the PM<sub>10</sub> national ambient air quality standard, Source: <http://www.epa.gov/oar/oaqps/greenbk/7214422.html>
4. The EPA Regional Administrator on August 15, 2007 signed a Federal Register proposal to concur that certain exceedances in 2006 were due to eligible exceptional events. If EPA's final action is to concur, San Joaquin would have 1.0 or fewer expected exceedances based on 2004-2006 data, and EPA would affirm its October 2006 determination of attainment. An entry will be made will be added for this area when a final determination is made.

Some valid (not underlined) values are based on sites that did not meet the minimum 75 percent data capture requirements per quarter (for all 12 quarters). These values are considered valid for regulatory usage per 40 CFR Part 50 Appendix K 2.3(c) or the *Guideline on Exceptions to Data Requirements for Determining Attainment of Particulate Matter Standards*. An incomplete, potentially violating expected number of exceedances is valid if zeros are assumed for the unmonitored periods and the 3-year metric still exceeds 1.0. Incomplete, potentially 'meeting' values for expected number of exceedances are valid if same-site maximum quarterly values (for the 3-year period) are substituted for missing data and the recalculated 3-year metric still meet the NAAQS. See substitution requirements and computation detail in stated references.

ND = No Data

**Table 2. Additional areas failing to meet the PM<sub>10</sub> NAAQS in 2004-2006.**

<u>State</u>	<u>County</u>	<u>2004-2006 Expected</u>		<u>Site</u>	<u>CBSA</u>	<u>Comment</u>
		<u>EPA Region</u>	<u>Number of Exceedances</u> <sup>1</sup>			
AL	Jefferson	4	2.5	010736003	Birmingham-Hoover, AL	Test EE = 1.7
AK	Matanuska-Susitna <sup>2</sup>	10	4.4 <sup>2</sup>	021700008	Anchorage, AK	
AZ	Maricopa <sup>3</sup>	9	2.5	040134011	Phoenix-Mesa-Scottsdale, AZ	Test EE = 1.7
AZ	Pinal <sup>3</sup>	9	278.2	040213013	Phoenix-Mesa-Scottsdale, AZ	Test EE = 92.7
CA	Kings	9	28.2	060310500	Hanford-Corcoran, CA	Test EE = 9.4
CA	San Diego	9	3.1	060732007	San Diego-Carlsbad-San Marcos, CA	
CA	Yolo	9	2.0	061131003	Sacramento--Arden-Arcade--Roseville, CA	
CO	Alamosa	8	1.4	080030003		
CO	Mesa	8	2.0	080770017	Grand Junction, CO	Test EE = 1.3
IN	Porter	5	1.4	181270023	Chicago-Naperville-Joliet, IL-IN-WI	
ME	Aroostook	1	1.1	230030013		
MO	St. Louis (City)	7	14.1	295100092	St. Louis, MO-IL	
MT	Big Horn	8	2.1	300030017		
NV	Nye	9	5.2	320230010	Pahrump, NV	Test EE = 1.7
NM	Bernalillo	6	2.3	350010026	Albuquerque, NM	
NM	Dona Ana <sup>3</sup>	6	5.4	350130017	Las Cruces, NM	
NM	Sandoval	6	4.6	350439004	Albuquerque, NM	
OH	Scioto	5	1.9	391450021	Portsmouth, OH	
OK	Tulsa	6	2.2	401430110	Tulsa, OK	
PA	Philadelphia	3	98.7	421010649	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	Test EE = 32.9
SC	Georgetown	4	1.2	450430006	Georgetown, SC	
TX	El Paso	6	12.5	481410044	El Paso, TX	Test EE = 8.3
TX	Harris	6	3.1	482011035	Houston-Sugar Land-Baytown, TX	
TX	Webb	6	1.4	484790016	Laredo, TX	
WY	Lincoln	8	2.1	560230800		
WY	Sweetwater	8	3.9	560370868	Rock Springs, WY	
VI	St. Croix	2	2.5	780100012		
VI	St. Thomas	2	7.6	780300007		

Notes:

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2. Exceedances in this county have been flagged as exceptional events. The EPA Regional Office is in the process of reviewing associated documentation.

3. These counties are near or, in some cases, overlap or totally contain previously designated PM<sub>10</sub> nonattainment areas. However, the monitoring sites from which these design values are derived are located outside the boundaries of the nonattainment area. Therefore, these counties are listed here as "additional areas".